

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: STREETWORKS

Report Number: P237325

Luminaire Tested: **ARCH-L-AF72-120-D-U-T4W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P237325  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-120-D-U-T4W  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 530mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16898.1 lumens  
Efficiency: N/A  
Efficacy: 137.4 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium - Non-Cutoff  
BUG Rating: B3 - U0 - G3

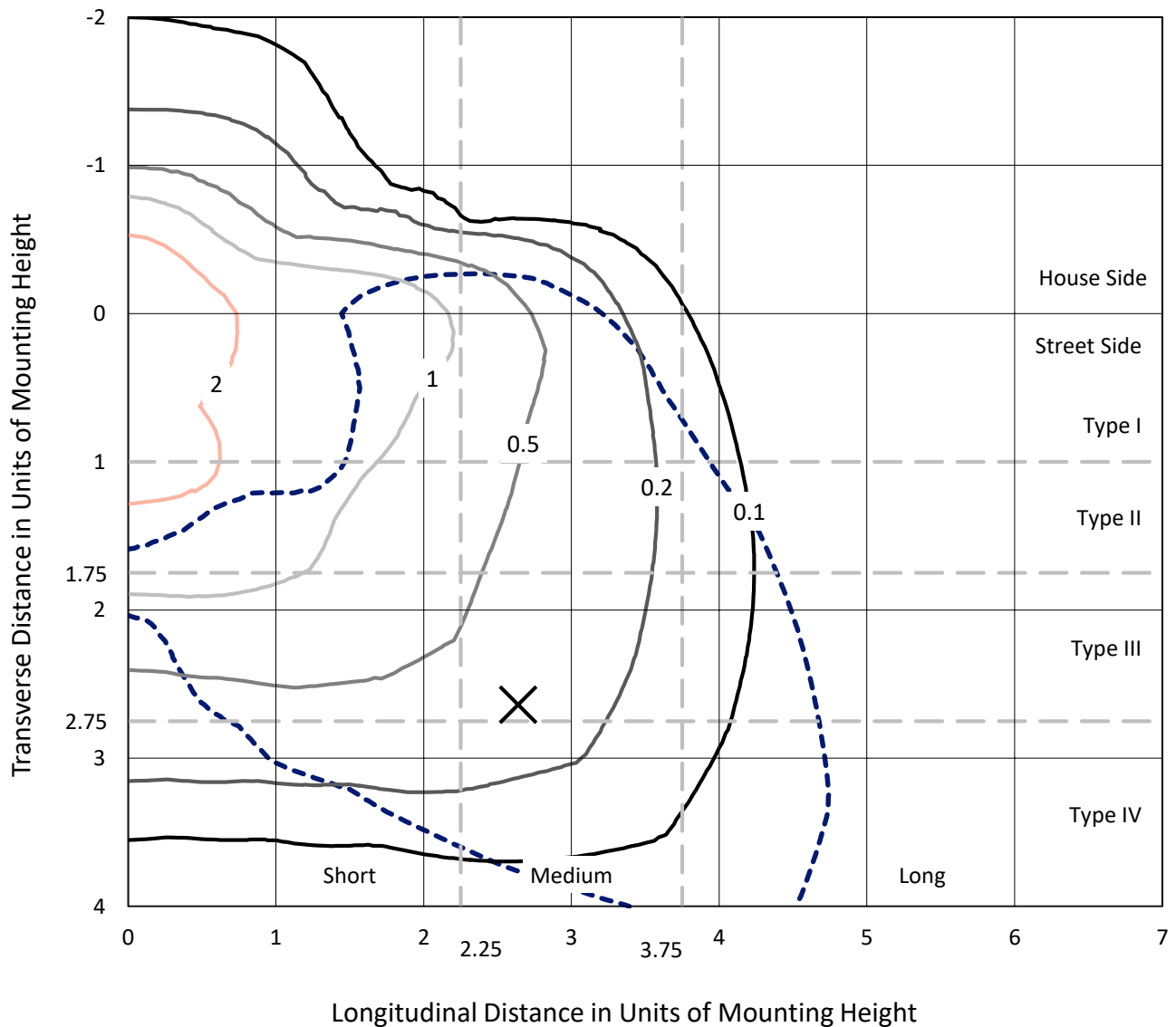
Input Watts (W): 123  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P237325  
 CATALOG NUMBER: ARCH-L-AF72-120-D-U-T4W

### Iso-Footcandle Lines of Horizontal Illumination

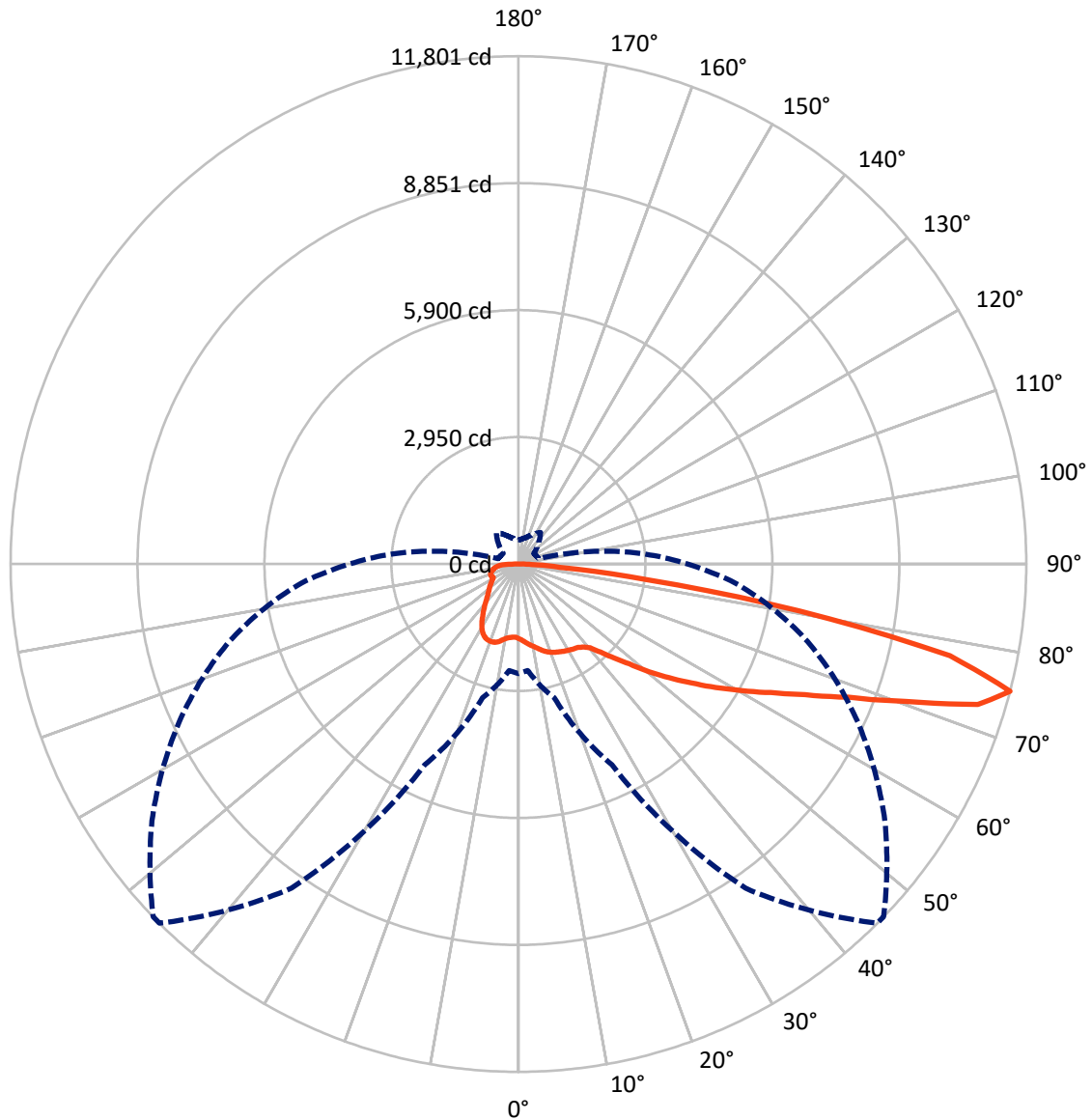
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.2 fc  
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P237325  
CATALOG NUMBER: ARCH-L-AF72-120-D-U-T4W

### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 75-Deg Vertical



REPORT NUMBER: P237325

CATALOG NUMBER: ARCH-L-AF72-120-D-U-T4W

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3914.6	0.0	3914.6
	% Fixture	23.2	0.0	23.2
<b>Street Side</b>	Lumens	12983.5	0.0	12983.5
	% Fixture	76.8	0.0	76.8
<b>Total</b>	Lumens	16898.1	0.0	16898.1
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	171.7	1.0
10°-20°	556.3	3.3
20°-30°	954.6	5.6
30°-40°	1335.2	7.9
40°-50°	1958.5	11.6
50°-60°	3050.9	18.1
60°-70°	4390.0	26.0
70°-80°	3824.2	22.6
80°-90°	656.7	3.9
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	16898.1	100.0
0°-180°	16898.1	100.0

**Coefficient of Utilization**



REPORT NUMBER: P237325

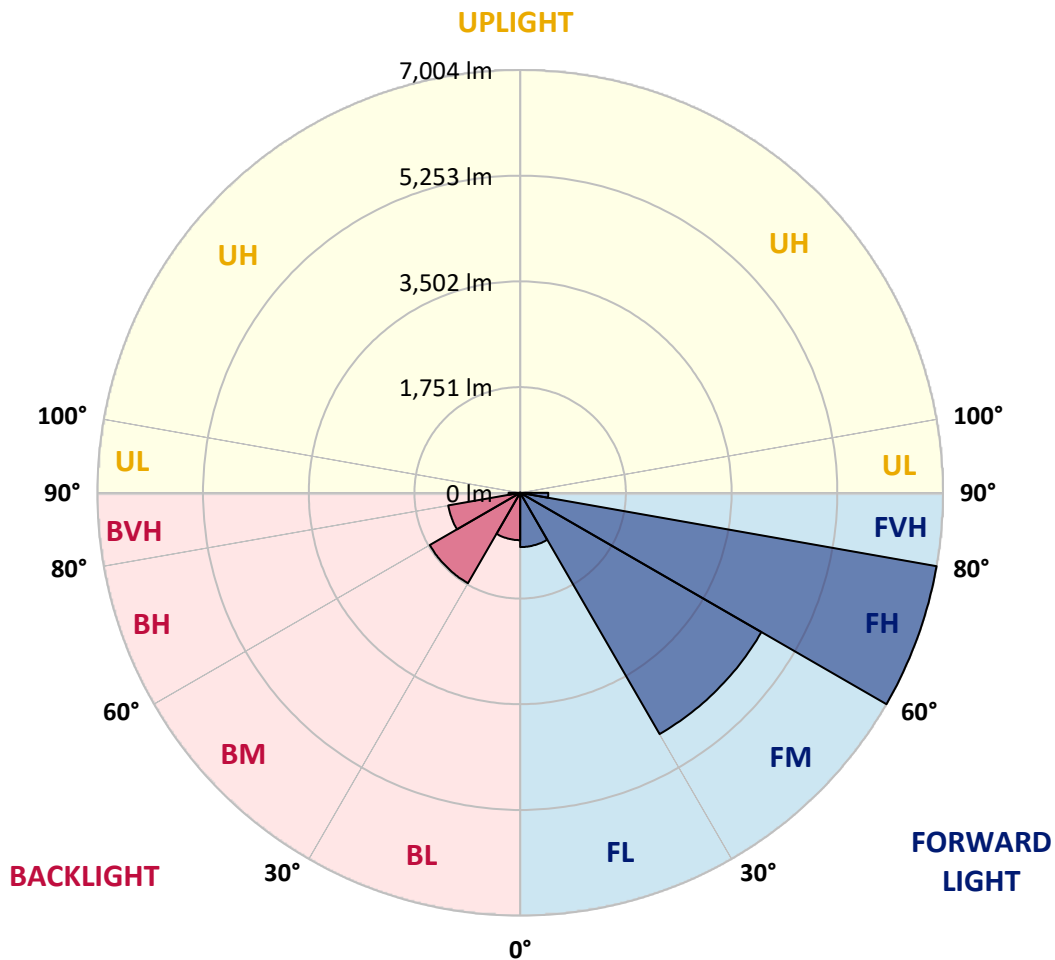
CATALOG NUMBER: ARCH-L-AF72-120-D-U-T4W

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	898.6	5.3			
FM	(30°-60°)	4614.5	27.3			
FH	(60°-80°)	7004.4	41.5			G3/7500
FVH	(80°-90°)	466.0	2.8			G3/500
BL	(0°-30°)	784.0	4.6	B2/1000		
BM	(30°-60°)	1730.0	10.2	B2/2500		
BH	(60°-80°)	1209.7	7.2	B3/2500		G3/2500
BVH	(80°-90°)	190.8	1.1			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type IV Medium





REPORT NUMBER: P237325

CATALOG NUMBER: ARCH-L-AF72-120-D-U-T4W

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1732.3	1732.3	1732.3	1732.3	1732.3	1732.3	1732.3	1732.3	1732.3	1732.3	1732.3
2.5°	1817.8	1804.6	1804.6	1794.8	1794.8	1778.3	1771.8	1768.5	1752.0	1742.2	1732.3
5°	1922.9	1906.5	1903.2	1880.2	1870.4	1834.2	1830.9	1807.9	1778.3	1748.7	1725.7
7.5°	2018.3	2008.5	1992.0	1969.0	1939.4	1893.4	1890.1	1853.9	1804.6	1765.2	1732.3
10°	2087.3	2080.7	2057.8	2028.1	1995.3	1949.2	1946.0	1906.5	1847.3	1801.3	1755.3
12.5°	2169.5	2159.7	2130.0	2090.6	2054.4	2011.7	2008.5	1975.5	1909.8	1850.6	1791.5
15°	2248.3	2235.2	2199.0	2159.7	2120.2	2084.1	2084.1	2047.8	1978.8	1909.8	1840.8
17.5°	2287.8	2281.3	2245.1	2202.3	2169.5	2143.2	2139.9	2107.1	2038.0	1965.7	1890.1
20°	2300.9	2304.3	2271.4	2225.3	2202.3	2189.2	2185.9	2162.9	2087.3	2018.3	1946.0
22.5°	2297.6	2307.6	2281.3	2232.0	2225.3	2225.3	2225.3	2199.0	2139.9	2070.9	1998.5
25°	2310.8	2323.9	2304.3	2245.1	2245.1	2258.3	2258.3	2245.1	2192.5	2133.4	2061.0
27.5°	2356.9	2366.7	2350.2	2268.1	2271.4	2291.1	2287.8	2291.1	2258.3	2202.3	2130.0
30°	2412.7	2425.8	2406.2	2304.3	2300.9	2320.7	2320.7	2337.1	2314.1	2255.0	2195.8
32.5°	2563.9	2560.7	2498.1	2343.7	2333.9	2353.6	2353.6	2370.0	2356.9	2310.8	2255.0
35°	3014.2	2964.9	2826.9	2471.9	2373.2	2383.2	2383.2	2412.7	2419.3	2383.2	2333.9
37.5°	3474.5	3458.0	3352.8	2813.7	2517.9	2445.6	2442.3	2485.1	2514.6	2485.1	2452.2
40°	3938.0	3924.8	3901.7	3270.7	2820.3	2557.4	2547.5	2583.7	2636.2	2616.5	2596.8
42.5°	4368.5	4362.0	4385.0	3721.0	3204.9	2797.4	2767.7	2725.0	2800.6	2794.0	2794.0
45°	4707.1	4723.6	4736.7	4141.7	3622.4	3106.3	3070.2	2925.5	3027.4	3053.7	3073.5
47.5°	4897.8	4910.9	4956.9	4552.6	4039.8	3464.6	3438.3	3201.6	3336.4	3415.3	3471.2
50°	5170.6	5134.4	5173.9	4953.6	4542.7	3931.4	3859.1	3573.1	3744.0	3882.1	4013.5
52.5°	5433.6	5374.4	5407.2	5417.1	5114.8	4388.3	4312.7	4010.3	4223.9	4440.8	4674.3
55°	5670.2	5666.9	5699.8	5867.4	5666.9	4878.0	4792.6	4493.4	4802.4	5035.8	5430.2
57.5°	5860.9	5893.7	6038.4	6390.1	6304.7	5410.6	5315.3	5055.5	5420.4	5653.8	6307.9
60°	6084.4	6137.0	6377.0	6833.8	6886.5	5969.3	5870.7	5683.4	6054.8	6291.5	7323.6
62.5°	6160.0	6235.6	6728.7	7300.6	7494.5	6580.7	6492.1	6367.1	6722.1	6935.8	8336.0
65°	5657.1	5801.8	6922.6	7540.6	8148.7	7317.1	7241.5	7133.0	7386.1	7527.5	9023.0
67.5°	5519.0	5584.8	6544.6	7885.7	8763.4	8263.7	8188.1	8000.8	8007.4	7948.2	9246.6
70°	5325.1	5397.4	6156.7	8145.5	9644.3	9558.9	9466.8	8914.6	8576.0	8217.8	8806.1
72.5°	4536.2	4513.2	5305.3	7445.2	10068.4	11163.0	11054.5	9897.5	8996.8	7984.3	7432.1
75°	2547.5	2481.8	3218.1	5150.9	9194.0	11800.7	11797.4	10393.8	8700.9	6955.5	5058.8
77.5°	739.6	719.9	1061.7	2159.7	6189.6	10252.4	10377.3	9374.8	7261.2	4996.4	2777.6
80°	348.4	355.0	457.0	713.3	2642.8	6617.0	6975.2	6173.2	4338.9	2304.3	1147.2
82.5°	220.2	223.5	312.3	460.2	1117.6	3004.4	3300.2	2777.6	1719.2	995.9	506.3
85°	138.1	138.1	207.0	302.4	667.3	959.8	1042.0	946.6	736.3	542.4	276.1
87.5°	75.6	75.6	124.9	174.2	364.9	309.0	318.9	378.0	460.2	331.9	138.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P237325

CATALOG NUMBER: ARCH-L-AF72-120-D-U-T4W

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1732.3	1732.3	1732.3	1732.3	1732.3	1732.3	1732.3	1732.3	1732.3	1732.3	1732.3
2.5°	1729.0	1722.4	1712.6	1709.2	1706.0	1702.7	1706.0	1712.6	1706.0	1706.0	1709.2
5°	1719.2	1712.6	1699.4	1699.4	1702.7	1706.0	1722.4	1732.3	1735.5	1735.5	1735.5
7.5°	1719.2	1709.2	1699.4	1702.7	1709.2	1722.4	1748.7	1765.2	1778.3	1781.6	1781.6
10°	1735.5	1722.4	1715.9	1722.4	1742.2	1752.0	1778.3	1804.6	1821.1	1827.6	1827.6
12.5°	1765.2	1752.0	1752.0	1765.2	1791.5	1804.6	1827.6	1847.3	1867.1	1876.9	1876.9
15°	1814.5	1798.0	1801.3	1824.3	1853.9	1867.1	1883.5	1890.1	1906.5	1919.7	1919.7
17.5°	1860.5	1844.1	1850.6	1876.9	1896.7	1903.2	1913.1	1909.8	1916.4	1926.2	1929.5
20°	1913.1	1896.7	1899.9	1916.4	1919.7	1913.1	1913.1	1903.2	1899.9	1916.4	1922.9
22.5°	1965.7	1949.2	1946.0	1936.1	1919.7	1903.2	1893.4	1883.5	1876.9	1893.4	1899.9
25°	2028.1	2005.1	1988.7	1946.0	1903.2	1873.6	1860.5	1853.9	1850.6	1867.1	1873.6
27.5°	2097.2	2074.1	2024.8	1932.8	1863.8	1814.5	1804.6	1804.6	1811.2	1821.1	1827.6
30°	2162.9	2139.9	2051.1	1903.2	1794.8	1722.4	1712.6	1722.4	1738.9	1748.7	1758.6
32.5°	2228.6	2205.7	2067.6	1857.2	1692.9	1600.8	1594.3	1610.6	1636.9	1643.6	1650.1
35°	2317.4	2294.4	2087.3	1791.5	1564.7	1466.1	1459.4	1469.4	1492.4	1502.2	1512.0
37.5°	2442.3	2429.2	2116.9	1719.2	1446.4	1337.8	1318.2	1311.5	1324.7	1321.4	1334.5
40°	2606.7	2616.5	2169.5	1623.8	1331.3	1219.6	1176.8	1157.1	1143.9	1117.6	1130.8
42.5°	2846.7	2853.2	2228.6	1515.4	1232.7	1107.8	1051.9	1015.7	989.4	946.6	953.3
45°	3198.4	3142.5	2297.6	1400.3	1143.9	1019.0	953.3	910.5	874.3	838.2	841.5
47.5°	3665.1	3494.2	2373.2	1305.0	1055.2	946.6	887.5	838.2	795.4	765.9	769.2
50°	4240.3	3931.4	2448.8	1216.2	966.4	890.8	838.2	785.6	742.9	713.3	710.0
52.5°	4999.7	4457.3	2498.1	1117.6	877.7	841.5	795.4	746.1	693.6	657.5	654.2
55°	5788.6	5068.7	2540.9	999.3	792.2	785.6	762.6	706.8	644.3	598.2	591.7
57.5°	6656.3	5722.8	2573.7	884.2	726.4	739.6	733.0	667.3	598.2	555.6	552.2
60°	7445.2	6400.0	2468.6	782.4	667.3	693.6	700.1	644.3	608.1	618.0	621.2
62.5°	8240.8	6922.6	2067.6	706.8	627.8	664.0	719.9	716.6	700.1	716.6	719.9
65°	8526.7	7031.0	1466.1	644.3	588.4	677.1	782.4	775.7	700.1	670.5	664.0
67.5°	8365.7	6708.9	986.1	594.9	558.8	693.6	848.0	775.7	673.8	634.4	621.2
70°	7599.7	5916.7	723.1	545.6	532.5	690.3	884.2	772.4	660.7	618.0	601.5
72.5°	6061.4	4565.7	581.9	499.6	493.1	673.8	904.0	765.9	647.5	601.5	581.9
75°	3924.8	2840.0	489.8	453.6	433.9	647.5	894.1	746.1	631.2	571.9	558.8
77.5°	1821.1	1222.8	417.5	401.0	378.0	608.1	864.5	706.8	594.9	539.1	522.6
80°	848.0	578.5	351.7	348.4	338.6	575.2	825.0	660.7	552.2	506.3	479.9
82.5°	453.6	348.4	286.0	286.0	295.8	535.8	775.7	604.9	496.3	473.3	404.3
85°	240.0	200.5	207.0	223.5	253.1	473.3	710.0	545.6	433.9	361.6	351.7
87.5°	121.6	128.2	128.2	151.2	194.0	384.6	585.1	450.3	368.2	295.8	289.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)